

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (ORIGINAL) A method of measuring a component in blood, comprising:
causing a redox reaction between the component in the blood and an oxidoreductase in the presence of a mediator;
detecting an oxidation current or a reduction current caused through the redox reaction by an electrode system; and
calculating an amount of the component based on a value of the detected current, wherein the method further comprises measuring a Hct value of the blood and correcting the amount of the component using this Hct value, the measurement of the Hct value comprising:
providing an electrode system having a working electrode and a counter electrode;
providing a mediator on the counter electrode but not on the working electrode;
supplying the blood to the electrode system;
applying a voltage to the electrode system in this state to cause an oxidation current or a reduction current to flow between the electrodes;
detecting the oxidation current or the reduction current; and
calculating the Hct value based on a value of the detected current.
2. (ORIGINAL) The method according to claim 1, wherein the mediator used for the measurement of the Hct value is a ferricyanide.
3. (CURRENTLY AMENDED) The method according to claim [[2]] 1, wherein ~~the ferricyanide~~ the mediator used for the measurement of the Hct value is potassium ferricyanide.

4. (ORIGINAL) The method according to claim 1, wherein, in the measurement of the Hct value, the working electrode on which the mediator is not provided is coated with a polymeric material.
5. (CURRENTLY AMENDED) The method according to claim ~~[[4]]~~ 1, wherein ~~the polymeric material is,~~ in the measurement of the Hct value, the working electrode on which the mediator is not provided is coated with carboxymethylcellulose.
6. (ORIGINAL) The method according to claim 1, wherein the voltage applied in the measurement of the Hct value is equal to or higher than a voltage causing electrolysis of water.
7. (ORIGINAL) The method according to claim 1, wherein the voltage applied in the measurement of the Hct value is 1 to 10 V.
8. (ORIGINAL) The method according to claim 1, wherein the voltage applied in the measurement of the Hct value is 1 to 6.5 V.
9. (ORIGINAL) The method according to claim 1, wherein the correction using the Hct value is carried out based on one of a calibration curve and a calibration table that have been prepared previously for showing a relationship between a Hct value and an amount of the component.
10. (ORIGINAL) The method according to claim 1, wherein the Hct value is measured after the amount of the component has been measured.
11. (CURRENTLY AMENDED) The method according to claim 1, wherein the electrode system for detecting the oxidation current or the reduction current ~~of the component~~ in the measurement of the component comprises a working electrode and a counter electrode.

12. (ORIGINAL) The method according to claim 1, further comprising measuring a temperature of a measurement environment,

wherein the amount of the component is corrected using the measured temperature.

13. (CURRENTLY AMENDED) The method according to claim 1, further comprising measuring a temperature of a measurement environment,

wherein the amount of the component is corrected using the measured temperature and the correction using the temperature is carried out based on one of a calibration curve and a calibration table that have been prepared previously for showing a relationship between a blood temperature and an amount of the component.

14. (ORIGINAL) The method according to claim 1, wherein the component to be measured is at least one selected from the group consisting of glucose, lactic acid, uric acid, bilirubin, and cholesterol.

15. (ORIGINAL) The method according to claim 1, wherein the component to be measured is glucose, and the oxidoreductase is at least one of glucose oxidase and glucose dehydrogenase.

16. (ORIGINAL) A sensor for measuring a component in blood by causing a redox reaction of the component and detecting an oxidation current or a reduction current caused through the redox reaction by an electrode,

wherein the sensor comprises:

a first analysis portion comprising a first electrode system on which at least an oxidoreductase that acts upon the component and a mediator are provided; and

a second analysis portion comprising a second electrode system that comprises a working electrode and a counter electrode, a mediator being provided on the counter electrode but not on the working electrode,

in the first analysis portion, the component in the blood is measured by causing a redox reaction between the component and the oxidoreductase in the presence of the

mediator and detecting by the first electrode system an oxidation current or a reduction current caused to flow when a voltage is applied, and

in the second analysis portion, a Hct value of the blood is measured by supplying the blood to the second electrode system, applying a voltage to the blood in this state to cause an oxidation current or a reduction current to flow between the working electrode and the counter electrode, and detecting a value of the oxidation current or the reduction current.

17. (ORIGINAL) The sensor according to claim 16, capable of correcting an amount of the component based on the measured Hct value.

18. (ORIGINAL) The sensor according to claim 16, wherein the working electrode and the counter electrode in the second electrode system are provided on a same insulating base material so as to be coplanar and spaced apart from each other.

19. (ORIGINAL) The sensor according to claim 16, further comprising a channel for leading blood to the sensor,

wherein the second analysis portion is on an upstream side and the first analysis portion is on a downstream side with respect to flow of the blood supplied from one end of the channel.

20. (ORIGINAL) The sensor according to claim 16, further comprising a channel for leading blood to the sensor,

wherein, in the second electrode system, the working electrode is on an upstream side and the counter electrode is on a downstream side with respect to flow of the blood supplied from one end of the channel.

21. (ORIGINAL) The sensor according to claim 16, wherein the mediator in the second electrode system is a ferricyanide.

22. (CURRENTLY AMENDED) The sensor according to claim [21] 16, wherein ~~the ferrieyanide~~ the mediator in the second electrode system is potassium ferricyanide.

23. (ORIGINAL) The sensor according to claim 16, wherein, in the second electrode system, the working electrode on which the mediator is not provided is coated with a polymeric material.

24. (CURRENTLY AMENDED) The sensor according to claim [23] 16, wherein ~~the polymeric material is~~ in the second electrode system, the working electrode on which the mediator is not provided is coated with carboxymethylcellulose.

25. (ORIGINAL) The sensor according to claim 16, wherein, in the second electrode system, the applied voltage is equal to or higher than a voltage causing electrolysis of water.

26. (ORIGINAL) The sensor according to claim 16, wherein, in the second electrode system, the applied voltage to is 1 to 10 V.

27. (ORIGINAL) The sensor according to claim 16, wherein, in the second electrode system, the applied voltage is 1 to 6.5 V.

28. (ORIGINAL) The sensor according to claim 16, wherein the first electrode system comprises a working electrode and a counter electrode.

29. (CURRENTLY AMENDED) The sensor according to claim ~~[[28]]~~ 16, wherein the first electrode system comprises a working electrode and a counter electrode and, in the first electrode system and the second electrode system, at least one of the electrodes or all the electrodes provided in the first electrode system also serve as the counter electrode in the second electrode system.

30. (ORIGINAL) The sensor according to claim 28, wherein, in the first electrode system and the second electrode system, only the working electrode in the first electrode system also serves as the counter electrode in the second electrode system.

31. (ORIGINAL) The sensor according to claim 16, wherein the mediator provided on the first electrode system is a ferricyanide.

32. (CURRENTLY AMENDED) The sensor according to claim ~~[[31]]~~ 16, wherein ~~the ferricyanide~~ the mediator provided on the first electrode system is potassium ferricyanide.

33. (ORIGINAL) The sensor according to claim 16, further comprising an insulating substrate,

wherein the first analysis portion, the second analysis portion, and a channel for leading the blood to the analysis portions are formed on the insulating substrate, and

one end of the channel is open toward an outside of the sensor so as to serve as a blood supply port.

34. (CURRENTLY AMENDED) The sensor according to claim ~~[[33]]~~ 16, further comprising an insulating substrate,

wherein the first analysis portion, the second analysis portion, and a channel for leading the blood to the analysis portions are formed on the insulating substrate,

one end of the channel is open toward an outside of the sensor so as to serve as a blood supply port,

there is only one blood supply port, and

the channel branches so that ends of branched portions communicate with the analysis portions, respectively.

35. (CURRENTLY AMENDED) The sensor according to claim ~~[[33]]~~ 16, further comprising an insulating substrate,

wherein the first analysis portion, the second analysis portion, and a channel for leading the blood to the analysis portions are formed on the insulating substrate,

one end of the channel is open toward an outside of the sensor so as to serve as a blood supply port,

the second analysis portion is located in the channel, and

the first analysis portion is located farther from the blood supply port than the second analysis portion.

36. (CURRENTLY AMENDED) The sensor according to claim 16, further comprising an insulating substrate, a spacer, and a cover,

wherein the first analysis portion, the second analysis portion, and a channel for leading the blood to the analysis portions are formed on the insulating substrate,

one end of the channel is open toward an outside of the sensor so as to serve as a blood supply port, and

the cover is disposed on the insulating substrate via the spacer.

37. (ORIGINAL) The sensor according to claim 16, wherein the component to be measured is at least one selected from the group consisting of glucose, lactic acid, uric acid, bilirubin, and cholesterol.

38. (ORIGINAL) The sensor according to claim 16, wherein the component to be measured is glucose, and the oxidoreductase is at least one of glucose oxidase and glucose dehydrogenase.

39. (ORIGINAL) The sensor according to claim 16, wherein a polymeric material, an enzyme stabilizer, and a crystal homogenizing agent further are provided on the first electrode system.

40. (ORIGINAL) The sensor according to claim 16, further comprising a blood detecting electrode,

wherein the blood detecting electrode is located farther from the blood supply port than at least one of the analysis portions so that whether or not the blood is supplied to the at least one of the analysis portions can be detected by the blood detecting electrode.

41. (ORIGINAL) A measuring device for measuring a component in blood, comprising:

- means for holding the sensor according to claim 16;
- means for applying a voltage to the first electrode system of the sensor;
- means for detecting an oxidation current or a reduction current flowing through the first electrode system;
- means for calculating an amount of the component from a value of the detected current;
- means for applying a voltage to the second electrode system of the sensor;
- means for detecting an oxidation current or a reduction current flowing through the second electrode system; and
- means for calculating a Hct value of the blood from a value of the detected current.

42. (ORIGINAL) The measuring device according to claim 41, further comprising means for correcting the amount of the component using the Hct value.

43. (ORIGINAL) The measuring device according to claim 41, wherein the voltage applied to the second electrode system is equal to or higher than a voltage causing electrolysis of water.